## We claim:

- 1. Membrane active polyanions comprising hydrophobic esters and/or amides of polymaleic acid homopolymers.
- 2. A process for delivering a biologically active compound to a cell comprising associating the biologically active compound and the polymer of claim 1 with the cell.
- 3. The process of claim 2 wherein the biologically active compound is non-covalently associated with the polymer.
- 4. The process of claim 2 wherein the biologically active compound is covalently linked to the polymer
- 5. Membrane active polyanions comprising styrene-maleic anhydride-based random copolymers.
- 6. The polymer of claim 5 wherein hydrophobic groups are covalently linked to anhydride monomers in the polymer.
- 7. The polymer of claim 6 wherein the hydrophobic groups are selected from the list consisting of: hydrophobic esters and hydrophobic amides.
- 8. The polymer of claim 7 wherein a functional group is covalently linked to an anhydride monomer in the polymer.
- 9. A process for delivering a biologically active compound to a cell comprising associating the biologically active compound and the polymer of claim 5 with the cell.
- 10. The process of claim 9 wherein the biologically active compound is non-covalently associated with the polymer.
- 11. The process of claim 9 wherein the biologically active compound is covalently linked to the polymer.
- 12. Membrane active polyanions comprising vinyl ether-maleic anhydride-based alternating copolymers.
- 13. The polymer of claim 12 wherein the vinyl ether is selected from the group comprising alkyl vinyl ether and aryl vinyl ether.
- 14. The polymer of claim 13 wherein the alkyl vinyl ether is selected from the group consisting of: propyl vinyl ether and butyl vinyl ether.

- 15. The polymer of claim 12 wherein hydrophobic groups are covalently linked to anhydride monomers in the polymer.
- 16. The polymer of claim 15 wherein the hydrophobic groups are selected from the group consisting of: hydrophobic esters and hydrophobic amides.

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- 17. The polymer of claim 12 wherein a functional group is covalently linked to an anhydride monomer in the polymer.
- 18. A process for delivering a biologically active compound to a cell comprising associating the biologically active compound and the polymer of claim 12 with the cell.
- 19. The process of claim 18 wherein the biologically active compound is non-covalently associated with the polymer.
- 20. The process of claim 18 wherein the biologically active compound is covalently linked to the polymer.